Status of the Claims

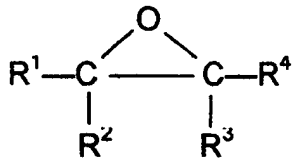
1-10. (cancelled)

11. (currently amended): A molten sulfur composition having the evolution of hydrogen sulfide (H_2S) therefrom inhibited comprising:

a) molten sulfur contaminated with at least one sulfhydryl compound, and

b) an effective amount to inhibit H_2S evolution of a scavenging agent selected from the group consisting of anhydrides and polymers thereof, conjugated ketones, linear carbonates, epoxides, monoesters and diesters of unsaturated dicarboxylic acids and polymers of these esters where the scavenging agent is in liquid form.

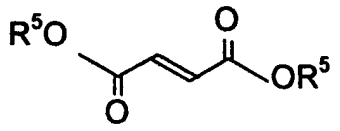
12. (previously presented): The composition of claim 11 where the scavenging agent is an epoxide having the formula:



(I)

wherein R^1, R^2, R^3, and R^4 independently are selected from the group consisting of hydrogen and hydrocarbon groups having between about 1-20 carbon atoms, selected from the group consisting of straight, branched, and cyclic alkyl groups, aryl, alkaryl, and aralkyl groups, and straight, branched, and cyclic alkyl groups substituted with oxygen, heterocyclic alkyls containing oxygen as a ring constituent, and wherein R^2 and R^3 may be joined to form a cycloalkyl or a heterocyclic alkyl having oxygen as a ring constituent.

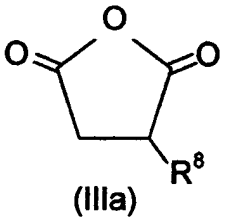
13. (previously presented): The composition of claim 11 where the scavenging agent is selected from the group consisting of monoesters and diesters of unsaturated dicarboxylic acids having the formula:



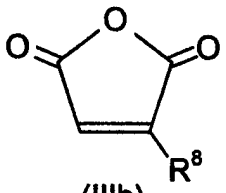
(II)

where R^5 are independently selected from the group consisting of hydrogen, C_1 to C_{12} alkyl, alkenyl, aryl and polyhydric alcohol moieties having 1 to 60 carbon atoms.

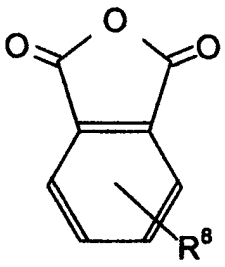
14. (previously presented): The composition of claim 11 where the scavenging agent is an anhydride having the formula:



(IIIa)



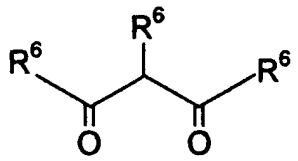
(IIIb)



(IIIc)

where R^8 is selected from the group consisting of hydrogen, C_1 to C_{12} alkyl, aryl, and alkenyl and polyhydric alcohol moieties having 1 to 12 carbon atoms.

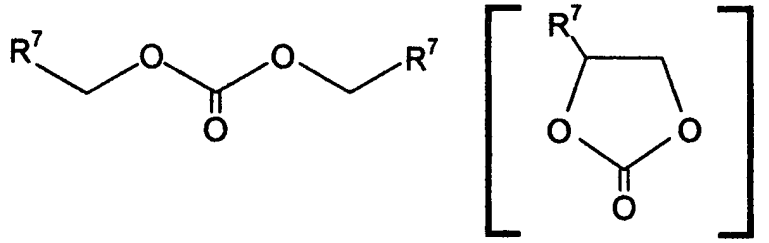
15. (previously presented): The composition of claim 11 where the scavenging agent is a conjugated ketone having the formula:



(IV)

where R^6 are independently selected from the group consisting of hydrogen, C_1 to C_{12} alkyl, aryl, and alkenyl.

16. (currently amended): The composition of claim 11 where the scavenging agent is selected from the group consisting of carbonates having the formula:



(V)

where R^7 is independently selected from the group consisting of hydrogen, C_1 to C_{12} straight and branched alkyl, aryl, alkenyl, cyclic and non-cyclic alkyl, aryl, alkenyl.

17. (previously presented): The composition of claim 11 where the scavenger agent is physically mixed with the molten sulfur and a molar amount of scavenging agent to sulfhydryl compound ranges from about 0.5 to 1 to about 1.5 to 1 in the molten sulfur.

18. (previously presented): The composition of claim 11 where the scavenging agent is incorporated into the molten sulfur by atomizing the scavenging agent into a vapor space over the molten sulfur.

19. (original): The composition of claim 11 where the molten sulfur is not discolored.

20. (currently amended): A molten sulfur composition having the evolution of hydrogen sulfide (H_2S) therefrom inhibited comprising:

a) the molten sulfur contaminated with at least one sulfhydryl compound, and

b) an amount of a scavenging agent selected from the group consisting of anhydrides and polymers thereof, conjugated ketones, linear carbonates, epoxides, monoesters and diesters of unsaturated dicarboxylic acids and polymers of these esters where the scavenging agent is in liquid form, where the molar amount of scavenging agent relative to the sulfhydryl compound ranges from about 0.01 to 1 to about 100 to 1.